

ABSTRACT

The present invention relates to a method for
5 measuring the maturity or cell wall thickening of a sample
of cellulosic fibre. The method including the steps of:
a) exposing the sample of fibre to polarized light;
b) capturing one or more images of the sample
through crossed polar lenses and a compensator plate so
10 that the image(s) include interference colours from the
sample; and
c) conducting computer analysis on the image(s)
captured in step b) to determine the maturity or degree of
cell wall thickening of the cellulosic fibre by comparing
15 the image(s) to reference colour interference data.

The present invention also relates to an
apparatus for carrying out the method. The apparatus
including an optical light path for exposing the sample of
fibre to polarized light, an image capturing means, and a
20 computer for conducting image analysis to determine fibre
maturity or the degree of cell wall thickening.